1		properly updated and maintained. This program includes distribution system
2		improvement projects, system interconnections, new main extensions, treatment
3		plant upgrades, new sources of supply, and storage additions.
4	Q.	WHAT PART OF THE COMPANY'S FIVE YEAR CAPITAL PROGRAM IS
5		INCLUDED IN THIS RATE INCREASE PETITION?
6	A.	Schedule 2A, Pages 2 and 3, entitled "Test Period Project List" provides a
7		detailed list of capital projects that are expected to be completed and placed in
8		service prior to June 30, 2014 (Test Period).
9	Q.	HOW OFTEN IS THE CAPITAL PROGRAM UPDATED?
10	Α.	The five year capital program is formally updated on an annual basis.
11	Q.	WITH REGARD TO THE INFRASTRUCTUE UPGRADES,
12		IMPROVEMENTS AND REGULATORY REQUIREMENTS DISCUSSED
13	-	ABOVE, CAN YOU QUANTIFY WHAT PORTION OF THE PROPOSED
14		CAPITAL PROGRAM ADDITIONS IN THIS MATTER ARE FOR THOSE
15		PURPOSES?
16	A.	Yes, my analysis of the Test Period Project List concludes that all of the projects
17		are for the purpose of infrastructure upgrade, improvements or regulatory
18		requirements except the Bayside Distribution Phase 2 project. The Bayside
19		project is for customer growth. These proposed capital program additions amount
20		to approximately \$8.5 million.
21	Q.	PLEASE DESCRIBE THE COMPANY'S CAPITAL BUDGETING PROCESS.
22	Α.	The annual capital budgeting process is developed as part of the five year capital
23		program. Each fall the status of the current year's (calendar year) capital budget

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1		is reviewed at a significant level of detail on a project-by-project basis, and the
2		five-year capital program is updated. The operational and financial status of each
3		project is tracked during the year. Some projects are not fully completed by the
4		end of the calendar year and therefore, are continued into the next year. Other
5		projects may or may not proceed as originally planned until a future period, due to
6		changing conditions. The following year's budget and related project timetable is
7		based on currently available information, as the Company analyzes system needs,
8		customer needs, and growth.
9	Q.	PLEASE BRIEFLY DESCRIBE THE AWARD PROCESS FOR THE
10		CONSTRUCTION OF CAPITAL PROJECTS.
11	A.	We maintain a list of pre-qualified contractors that are invited to submit bid
12		proposals for capital project work. The pre-qualification of contractors is the
13		result of an evaluation of the experience and reputation for quality of these firms.
14		Each project is competitively bid and multiple bids are normally received. The
15		construction project is awarded to the contractor with the lowest qualified bid in
16		order to achieve an appropriate balance between cost and quality.
17	Q	DO YOU HAVE MAPS THAT SHOW THE LOCATIONS FOR PROJECTS IN
18		THE CAPITAL PROGRAM?
19	A.	Yes, the maps can be found under Schedule 6.
20	Q.	WOULD YOU BRIEFLY DESCRIBE EACH OF THE PROJECTS ON
21		SCHEDULE 2A?
22	Α.	The location of each project is indicated by project number on the maps provided
23		under Schedule 6.

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1	1.	East District Improvements – This project includes the relocation
2		of a ground level storage tank from Asbury Chase to Drawyers
3		Creek and the installation of a new 173,000 gallon storage tank at
4		Asbury Chase to increase storage capacity for the East District and
5		enhance fire protection capabilities at Drawyers Creek.
6		Estimated Cost: \$354,307
7	2.	Dickerson Farms Piping Upgrades – This project involves the
8		upgrade of the existing raw water pipelines from Sch 80 pvc to
9		ductile iron within the plant. Estimated Cost: \$30,000
10	3.	NW District Media Replacement – This project involves the
11		replacement of the greensand and anthracite filtration media at the
12		Wheatland Plant. Estimated Cost: \$45,000
13	4.	NW District Control System Upgrades – This project involves the
14		upgrading of the existing process control systems at the Nautical
15		Cove, Wheatland, and Dickerson plants.
16		Estimated Cost: \$229,488
17	5.	Generals Greene – This project includes the demolition of the
18		existing plant and construction of a new building, piping, electrical
19		system, control system, and chemical addition.
20		Estimated Cost: \$884,607
21	6.	Kent County Flow Monitoring – This project involves the
22		installation of flow monitoring equipment at certain plants within

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1		Kent County. Work includes replacing flow metering, installing
2		instrumentation, and upgrading PLC's. Estimated Cost: \$325,000
3	7.	Canterbury Road Main Relocation – This project involves the
4		replacement of approximately 800 feet of 12-inch HDPE water
5		main due to DelDOT requirements for the construction of a bridge
6		Estimated Cost: \$160,740
7	8.	Camden District Hydraulic Upgrades – This project involves the
8		installation of approximately 7,700 feet of water main to connect
9		Pinehurst Village with Woodbury Acres.
10		Estimated Cost: \$727,235
11	9.	Hiddenbrook Main Extension – This project involves the
12		installation of approximately 4,200 feet of water main to
13		Hiddenbrook Acres. This main will eventually interconnect with
14		Lakeshore Village. Estimated Cost: \$428,423
15	10.	Seasons – Warrington Creek Interconnection – This project
16		involves the installation of approximately 1,500 feet of directional
17		drilled 12-inch PVC water main and 1,200 feet of PVC water
18		main. Estimated Cost: \$798,654
19	11.	Angola Elevated Storage Tank – This project involves the
20		construction of a new 400,000 gallon elevated storage tank to
21		service the Angola District. Estimated Cost: \$1,743,638

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1	12.	Meadows Plant Upgrades – This project involves the upgrade of
2		the existing piping, electrical control system, and installation of
3		nitrate removal equipment. Estimated Cost: \$227,107
4	13.	Townsend Property Interconnection – This project involves the
5		installation of approximately 1200 feet of 12-inch HDPE by
6		directional drill method to interconnect Bay Crossing with
7		Senators. Estimated Cost: \$217,847
8	14.	Aspen Meadows Hydrants – The project involves the installation
. 9		of fire protection to Aspen Meadows. Estimated Cost: \$270,830
10	15.	Angola District SCADA – This project involves the installation of
11		SCADA equipment in the Angola District and integration with the
12		existing SCADA network. Estimated Cost: \$150,000
13	16.	Bayside Phase 2 Distribution – This project involves the
14		installation of new water main, valves, and hydrants to serve
15		Bayside. Estimated Cost: \$136,971
16	17.	Clearbrooke Upgrades – This project involves the installation of
17		piping, chemical equipment, and building to eliminate a confined
18		space issue. Estimated Cost: \$49,339
19	18.	Love Creek Woods Generator – This project involves the
20		installation of a generator for emergency power. Estimated Cost:
21		\$49,377

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1	19	€.	Ocean Farms Fire Protection Upgrades – This project involves the
2			upgrade of the fire protection system by installing the hydrants on
3			the domestic supply system.
4			Estimated Cost: \$48,967
5	20).	Property Records – This project involves the documentation and
6			recordation of easements and property rights.
7			Estimated Cost: \$149,198
8	21	1.	Wells – The cost for replacing/adding/upgrading wells is projected
9			at \$19,516.
10	22	2.	Treatment and Pumping Structures – The cost for
11			replacing/installing treatment and pumping structures is projected
12			at \$34,547.
13	23	3.	Pumping Equipment – The cost for replacing/installing pumping
14			equipment is projected at \$172,369.
15	24	1.	Treatment Equipment – The cost for replacing/installing treatment
16			equipment is projected at \$38,976.
17	25	5.	Mains, Blow-offs & Valves – The cost of replacing/installing
18			mains, blow-offs and valves is projected at \$152,078.
19	26	5.	Service Lines – The cost of installing new service lines is projected
20			to be \$611,087.
21	27	7.	Meter Purchase & Installations – Meters are installed for new
22			service connections and meters are replaced as part of the meter

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1			testing program to meet regulatory service standards. The cost of
2			purchasing and installing new meters is projected to be \$376,000.
3		28.	Hydrants – The cost of replacing/adding fire hydrants is projected
4			at \$50,280.
5		29.	Leasehold Improvements – Emergency generators are to be
6			installed at the Dover Office Complex and Operations Center and
7			the fence will be extended at the Operations Center. The cost for
8			leasehold improvements is projected at \$23,000.
9		30.	Computers – Routine replacement of computers, printers, servers,
10			networking equipment, and technological upgrades will be
11			completed. The cost for computer systems is projected at
12			\$311,000.
13		31.	Transportation – The cost for replacing vehicles is projected at
14			\$185,820.
15		32.	Tools and Shop Equipment – The cost for tools and shop
16			equipment is projected at \$30,000.
17		33.	Lab Equipment – The cost for lab equipment is projected at
18			\$6,000.
19			
20	Q.	IS IT ANTIC	IPATED THAT ALL OF THESE PROJECTS WILL BE IN
21		SERVICE B	Y THE END OF THE TEST PERIOD?
22	Α.	Yes, most ha	ve been started and are in various stages of design or construction.

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1	Q.	ARE ALL OF THESE PROJECTS NECESSARY AND ARE THE COSTS
2		REASONABLE TO PROVIDE SAFE, ADEQUATE AND PROPER SERVICE
3		TO THE CUSTOMERS OF TIDEWATER?
4	A.	Yes. Based upon my knowledge of the systems and my experience in the water
5		industry, they are.
6	Q.	DOES TIDEWATER EXPECT TO RECEIVE CONTRIBUTIONS-IN-AID-OF-
7		CONSTRUCTION (CIAC)?
8	A.	CIAC is projected to be recorded for projects that are subject to Docket 15 rules
9		as well as pre-Docket 15 rules. Schedule 2A includes CIAC recorded by type;
10		pre-Docket 15 and under Docket 15 rules, as applicable.
11	Q.	WHAT IS DOCKET 15?
12	Α.	PSC Regulation Docket 15, effective April 10, 2006 via Order No. 6873,
13		governs the terms and conditions under which water utilities require advances
14		and/or contributions from customers or developers, and proper rate making
15		treatment for such contributions and advances. Not all of the Test Period projects
16		are subject to Docket 15 as they are either system improvements and/or regulatory
17		requirements, or are for projects that were under contract prior to the
18		implementation of Docket 15.
19	Q.	WILL THERE BE ANY REFUNDS TO DEVELOPERS DURING THE TEST
20		PERIOD?
21	Α.	Tidewater estimates that there will be rebate payments to developers for pre-
22		Docket 15 projects. This is reflected on Schedule 2A, page 3 of 3.

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1	Q.	DO YOU HAVE AN OPINION ON THE REASONABLENESS AND
2		NECESSITY OF THE EXPENDITURES YOU HAVE JUST DISCUSSED?
3	A.	Yes, in my opinion, all these expenditures are reasonably priced and are necessary
4		to provide safe, adequate and proper service.
5	Q.	DOES THIS CONCLUDE YOUR TESTIMONY AT THIS TIME?
6	Α.	Yes, it does.

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Jeremy M. Kalmbacher, P.E.

QUALIFICATIONS

During my career at Tidewater, I have been directly involved in the engineering, planning, budgeting, and project management of over \$50 million of capital improvement projects including distribution and collection upgrades, treatment upgrades, elevated storage tanks, well installations, and wastewater disposal systems. In my role with the company during the last three years, my responsibilities have extended in the wastewater utility business, GIS development, and ERP implementations such as work and asset management and mobile workforce management.

EXPERIENCE

2006-Present Director of Engineering, Tidewater Utilities, Inc.

- Prepare, manage, and implement 5 year capital program
- Oversee engineering and construction contracts
- Perform engineering project management
- Supervise engineering and inspection staff
- Provide rate case testimony to Public Service Commission

2004-2006 Manager of Engineering, Tidewater Utilities, Inc.

- Manage and implement annual capital budget
- Oversee engineering staff
- Perform engineering project management

2002-2004 Staff Engineer, Tidewater Utilities, Inc.

- Manage construction projects and corresponding budgets
- Review and recommendation of engineering and construction contracts
- Design of water pumping, storage and treatment facilities
- Design and layout of water distribution systems
- Exploration of geological substrata for ground water yields

EDUCATION

1995-1999 Bachelor of Civil Engineering, University of Delaware

1999-2002 Graduate Research Assistant, Center for Applied Coastal Research, University of Delaware

- Application of SHORECIRC to hydrodynamic phenomena
- Research concentration on infragravity wave generation
- Fluid mechanics lab instructor

PROFESSIONAL AFFILIATIONS (past or current)

Member, American Water Works Association Member, Water Environment Federation Associate Director, National Utility Contractors Association of Delmarva